

## Expansion Efforts Continue: GasGun Services Now Available in Oklahoma and Texas

With demand for GasGun services growing in other parts of the country, J Integral Engineering is expanding its operations into Oklahoma and Texas.

In Oklahoma, we are pleased to announce that Midwest Logging and Perforating has joined our team of certified wireline companies now fielding the GasGun. The owner, Steve Smith, has expressed great enthusiasm for the benefits that the GasGun will likely bring to operators in Oklahoma. Midwest conducted their first GasGun stimulation in September 2001.

We are also pleased to announce that WSI is now providing GasGun services in Texas and New Mexico. WSI recognized the increasing popularity of propellant stimulations and decided that the

GasGun is best suited to meet their clients' needs. We are very excited to have WSI represent our tool throughout Texas and look forward to a successful partnership.

In Oklahoma contact:

Steve Smith  
Midwest Logging and Perforating  
P.O. Box 1251  
Seminole, OK 74818  
Phone: (405) 382-4200

For Texas and New Mexico contact:

Johnny Sutter  
WSI  
P.O. Drawer 670  
Snyder, TX 79550  
Phone: (915) 573-3948

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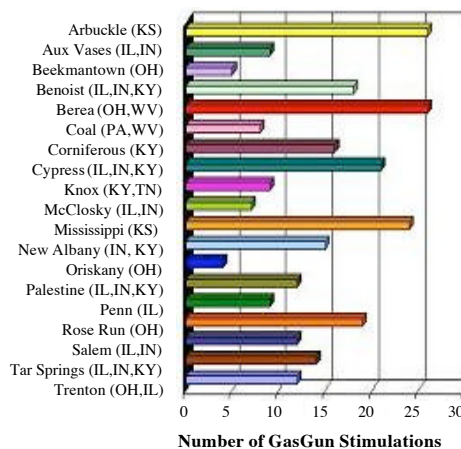
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## GasGun Success Stories and Field Observations

Over 450 GasGun stimulations have now been conducted, and we continue to receive very positive results from various parts of the country. Over the last five years we have learned that we have a particular niche in successfully treating zones with close contacts to water. Knowing that the GasGun's fractures stay in the zone being treated, we have not been surprised that operators are pleased with these types of treatments.

We have also learned that operators find the GasGun to be a very beneficial pretreatment to acid jobs and hydraulic fracture stimulations. The GasGun creates a fracture network that allows acid to etch channels deep into the formation. It also effectively breaks down the formation, which allows for acid jobs and hydraulic fracture stimulations to be performed at significantly reduced pressures.

Popular Formations for GasGun Stimulations



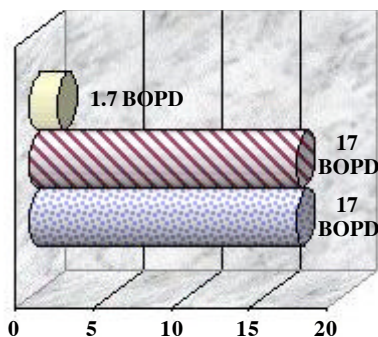
### Recent Results

In December 2001, a new well in Butler County, Kansas, was stimulated with an 8 foot GasGun. This well is a cased hole

### Quick Fact:

**98.5% of the GasGun's energy is delivered to the formation even with only a 300 ft column of water tamping the charge.**

Mississippi Chert



Prior Production  
 Production after GasGun  
 Production after 2 weeks

completion in the Arbuckle dolomite formation at a depth of 2337 feet. Immediately after the stimulation production came in at 25 BOPD and quickly leveled off at 15 BOPD. One month later the well was still producing 15 BOPD.

In December 2001, two wells in Butler County, Kansas, were stimulated with the GasGun. These wells, located in the same field, were both completed open hole in the Arbuckle dolomite formation. The first well was stimulated with a 10 foot GasGun at a depth of 2377 feet. The second well was stimulated with a 4 foot GasGun at a depth of 2364 feet. After the GasGun stimulations, production in each well rose from 2 to 7 BOPD.

In October 2001, a new well in McLean County, Kentucky, was stimulated with a 4 foot GasGun. This is a cased hole well in the O'Hara limestone formation at a depth of 1716 feet. The well had no

natural production prior to stimulation and began making 24 BOPD after the GasGun treatment. The well was then acidized and production leveled off at 48 BOPD.

In August 2001, a well in Hodgeman County, Kansas, was stimulated with a 6 foot GasGun. This well is a cased hole completion in the Mississippi chert formation at a depth of 4274 feet. Oil production increased from 1.7 to 17 BOPD. Water production increased from 20 to 85 BOPD.

In November 2000, a well in Clinton County, Illinois, was stimulated with a 4 foot GasGun. The well was completed open hole in the Benoist sandstone formation at a depth of 1436 feet. Oil production increased from 0.5 to 4.5 BOPD. We received a report 4 months later stating that production was still holding at 4.5 BOPD.

### Technology Update: Coming Soon, Rubber Canister Design Reduces Debris and Increases Hydrostatic

A new rubber canister has been developed and a prototype was successfully field tested in November 2001. Results from the test demonstrated a significant reduction in the amount of debris as compared to our current copper canisters. The copper canisters have worked very well for most of our customers, but on occasion the debris left in the well has caused problems. We expect this new

design to effectively eliminate those problems.

Also, lab tests indicate that the new canister will be able to stand off significantly more hydrostatic pressure. This will allow the GasGun to be fielded in wells where the current limit of 900 psi (an 1800 foot fluid column) prevents us from being able to do the stimulation.



For more information about this new development and when it will be available in your area, please call (503) 557-1370.

For more information about the GasGun please contact:

Dr. Richard A. Schmidt  
 President  
 J Integral Engineering, Inc.  
 165 SW Tualatin Loop  
 West Linn, OR 97068  
 (503) 557-1370  
 E-mail: [JIntegral@thegasgun.com](mailto:JIntegral@thegasgun.com)  
 Web site: [www.TheGasGun.com](http://www.TheGasGun.com)

### Upcoming Meetings and Presentations

In March, two presentations on GasGun technology will be held in Kansas. The first is on March 26 from 2-4 pm at the Great Bend Holiday Inn. The second is during the PTTC Petroleum Technology Fair held at the Wichita Airport Hilton on

March 27. Dr. Richard Schmidt will also give two presentations during the SPE/DOE 13th Symposium on Improved Oil Recovery, April 13-17 in Tulsa, OK. Call (503) 557-1370 for more details.